

WHAT IS CLAIMED IS:

1. A composition, comprising a polyorganosiloxane and an admixed sterically hindered amine light stabilizer (HALS) wherein the polyorganosiloxane is free from alternating cyclic hydrocarbon residues.
2. The composition of claim 1, wherein said polyorganosiloxane comprises moieties of the formula $[(CH_3)_2SiO]$ and a terminal trimethylsiloxane unit $[(CH_3)_3SiO_{0.5}]$.
3. The composition of claim 1, wherein said polyorganosiloxane comprises $[(CH_3)_3SiO_{0.5}]$ units in a range between about 0.7 mol% and about 6.0 mol%.
4. The composition of claim 1, wherein said polyorganosiloxane comprises $[(CH_3)_3SiO_{0.5}]$ units in a range between about 2.0 mol% and about 5.5 mol%.
5. The composition of claim 1, wherein said polyorganosiloxane comprises $[(CH_3)_3SiO_{0.5}]$ units in a range between about 2.5 mol% and about 5 mol%.
6. The composition of claim 1, wherein said polyorganosiloxane is a reaction product of a non-cyclic, vinylsiloxane fluid and an organohydrogensiloxane crosslinker.
7. The composition of claim 6, wherein said polyorganosiloxane is a reaction product of a non-cyclic, vinylsiloxane fluid and an organohydrogensiloxane crosslinker in a ratio to provide SiH in a range between about 0.2 moles and about 5.0 moles per mole of vinyl-siloxane functionality.
8. The composition of claim 6, wherein said polyorganosiloxane is a reaction product of a non-cyclic, vinylsiloxane fluid and an organohydrogensiloxane crosslinker in a ratio to provide SiH in a range between about 0.75 moles and about 2.5 moles per mole of vinyl-siloxane functionality.

9. The composition of claim 6, wherein said polyorganosiloxane is a reaction product of a non-cyclic, vinylsiloxane fluid and an organohydrogensiloxane crosslinker in a ratio to provide SiH in a range between about 1.0 moles and about 1.5 moles per mole of vinyl-siloxane functionality.

10. The composition of claim 1, wherein said polyorganosiloxane is a reaction product of a curable composition comprising a non-cyclic, vinylsiloxane fluid, an organohydrogensiloxane crosslinker and a filler in a range between about 5 and about 100 parts by weight based on 100 parts by weight of the vinylsiloxane fluid.

11. The composition of claim 10, wherein said filler is selected from fumed silica, precipitated silica and mixtures thereof.

12. The composition of claim 10, wherein said curable composition comprises less than 50 parts by weight of filler per 100 parts by weight of the vinylsiloxane fluid.

13. The composition of claim 10, wherein said curable composition comprises an extending or reinforcing filler selected from the group consisting of titanium dioxide, lithopone, zinc oxide, zirconium silicate, silica aerogel, iron oxide, diatomaceous earth, calcium carbonate, silazane treated silicas, glass fiber, magnesium oxide, chromic oxide, zirconium oxide, aluminum oxide, alpha quartz, calcined clay, carbon, graphite, and synthetic fiber.

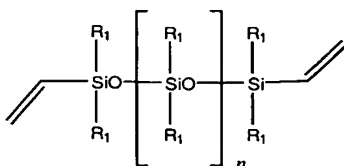
14. The composition of claim 10, wherein said polyorganosiloxane is a reaction product of a non-cyclic, vinylsiloxane fluid and an organohydrogensiloxane crosslinker cured in the presence of a platinum catalyst to form an elastomeric material.

15. The composition of claim 10, wherein said vinylsiloxane fluid comprises vinylsiloxy units in a range between about 0.05 mol% and about 3.5 mol% based on the total moles of condensed organosiloxy units in the vinylsiloxane.

16. The composition of claim 10, wherein said vinylsiloxane fluid comprises vinylsiloxo units in a range between about 0.1 mol% and about 3 mol% based on the total moles of condensed organosiloxo units in the vinylsiloxane.

17. The composition of claim 10 wherein said vinylsiloxane fluid comprises vinylsiloxo units in a range between about 0.14 mol% and about 2 mol% based on the total moles of condensed organosiloxo units in the vinylsiloxane.

18. The composition of claim 10, wherein said vinylsiloxane fluid comprises:



where n is a positive integer of a value to provide a viscosity in a range between about 100 centipoise and about 200,000 centipoise at 25°C, and each R₁ is a monovalent hydrocarbon radical selected from the group consisting of alkyl radicals, aryl radicals, aralkyl radicals, alkenyl radicals, halogenated derivatives of said radicals, and cyanoalkyl radicals.

19. The composition of claim 18, wherein said R₁ is an alkyl radical having carbon atoms in a range between 1 and 8.

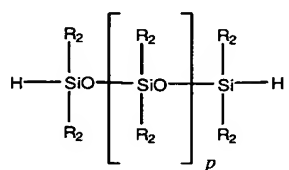
20. The composition of claim 10, wherein said organohydrogensiloxane crosslinker comprises chemically combined hydrogen attached to silicon in a range between about 0.2 moles and about 5.0 moles per mole of vinyl-siloxane functionality.

21. The composition of claim 10, wherein said organohydrogensiloxane crosslinker comprises chemically combined hydrogen attached to silicon in a range between about 0.75 moles and about 2.5 moles per mole of vinyl-siloxane functionality.

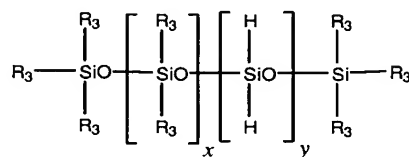
22. The composition of claim 10, wherein said organohydrogensiloxane crosslinker comprises chemically combined hydrogen attached to silicon in a range between about 1.0 moles and about 1.5 moles per mole of vinyl-siloxane functionality.

23. The composition of claim 10, wherein said organohydrogensiloxane crosslinker comprises:

(2) or (3):



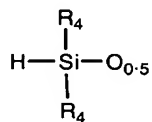
(2)



(3)

where p is a positive integer of a value to provide a viscosity in a range between about 1 centipoise and about 1,000 centipoise at 25°C, x and y are positive integers of sufficient value to provide a viscosity in a range between about 1 centipoise and about 1,000 centipoise at 25°C, and wherein R₂ and R₃ represent the same or different monovalent hydrocarbon radicals free of olefinic unsaturation and selected from the group consisting of an alkyl radical, aryl radical, aralkyl radical, halogenated derivative of said radicals and a cyanoalkyl radical.

24. The composition of claim 10, wherein said organohydrogensiloxane crosslinker comprises the units:

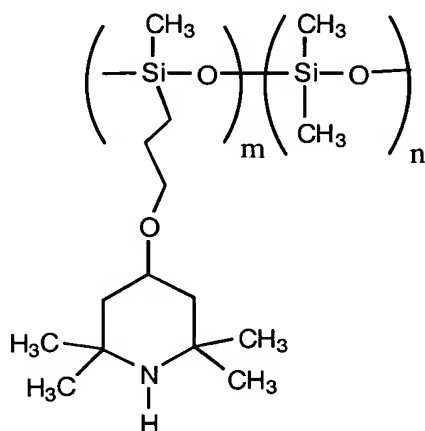


chemically combined with SiO₂ where the ratio of (R₄ + H) to Si varies in a range between about 1.0 and about 2.7, wherein R₄ represents the same or different

monovalent hydrocarbon radical free of olefinic unsaturation and selected from the group consisting of an alkyl radical, aryl radical, aralkyl radical, halogenated derivatives of said radicals and a cyanoalkyl radical.

25. The composition of claim 24, wherein said alkyl radical comprises carbon atoms in a range between 1 and 13.

26. The composition of claim 1, wherein said hindered amine light stabilizer is represented by the formula



where n is 0 or any integer, and m represents an integer greater than 3.

27. The composition of claim 26, wherein the methylsiloxane moiety forms a cyclic ring.

28. The composition of claim 27, wherein the methylsiloxane moiety forms a cyclic tetramer where $m=4$ and $n=0$ or forms an octamer where $m=8$ and $n=0$.

29. The composition of claim 26, wherein the methylsiloxane moiety forms a linear chain with trimethylsiloxane end groups.

30. The composition of claim 1, comprising said hindered amine light stabilizer in a range between about 0.05 weight % and about 10 weight %.

31. The composition of claim 1, comprising said hindered amine light stabilizer in a range between about 0.1 weight % and about 5 weight %.

32. The composition of claim 1, comprising said hindered amine light stabilizer in a range between about 0.25 weight% and about 1 weight%.

33. A thermally stable composition comprising a polyorganosiloxane modified HALS and a polyorganosiloxane free from alternating cyclic hydrocarbon residues.